

(2) Samples must be dropped on to the end of a cylindrical steel rod. The rod must be set vertically in a level hard surface. It must have a diameter of 38 mm (1.5 inches) and the edges of the upper end a radius not exceeding 6 mm (0.2 inches). The rod must protrude from the surface a distance at least equal to that between the primary receptacle(s) and the outer surface of the outer packaging with a minimum of 200 mm (7.9 inches). One sample must be dropped in a vertical free fall from a height of 1 m (3 feet), measured from the top of the steel rod. A second sample must be dropped from the same height in an orientation perpendicular to that used for the first. In each instance the packaging should be so orientated that the steel rod must be aimed to impact the primary receptacle(s). Following each impact, penetration of the secondary packaging is acceptable, provided that there is not leakage from the primary receptacle(s).

(i) Packagings subject to this section are not subject to § 178.503 or any other requirements of this subpart, except § 178.608.

[Amdt. 178-97, 55 FR 52723, Dec. 21, 1990, as amended by Amdt. 178-111, 60 FR 48787, Sept. 20, 1995]

Subpart N—Intermediate Bulk Container Performance-Oriented Standards

SOURCE: Amdt. 178-103, 59 FR 38068, July 26, 1994, unless otherwise noted.

§ 178.700 Purpose, scope and definitions.

(a) This subpart prescribes requirements applying to intermediate bulk containers intended for the transportation of hazardous materials. Standards for these packagings are based on the UN Recommendations.

(b) Terms used in this subpart are defined in § 171.8 of this subchapter and in paragraph (c) of this section.

(c) The following definitions pertain to the intermediate bulk container standards in this subpart.

(1) *Body* means the receptacle proper (including openings and their closures, but not including service equipment),

that has a volumetric capacity of not more than three cubic meters (3,000 liters, 793 gallons, or 106 cubic feet) and not less than 0.45 cubic meters (450 liters, 119 gallons, or 15.9 cubic feet) or a maximum net mass of not less than 400 kilograms (882) pounds.

(2) *Service equipment* means filling and discharge, pressure relief, safety, heating and heat-insulating devices and measuring instruments.

(3) *Structural equipment* means the reinforcing, fastening, handling, protective or stabilizing members of the body or stacking load bearing structural members (such as metal cages).

(4) *Maximum permissible gross mass* means the mass of the body, its service equipment, structural equipment and the maximum net mass (see § 171.8 of this subchapter).

[Amdt. 178-103, 59 FR 38068, July 26, 1994, as amended by Amdt. 178-108, 60 FR 40038, Aug. 4, 1995]

§ 178.702 Intermediate bulk container identification codes.

(a) Intermediate bulk container code designations consist of: two numerals specified in paragraph (a)(1) of this section; followed by the capital letter(s) specified in paragraph (a)(2) of this section; followed, when specified in an individual section, by a numeral indicating the category of intermediate bulk container.

(1) Intermediate bulk container code number designations are as follows:

Type	For solids, discharged		For liquids
	by gravity	Under pressure of more than 10 kPa (1.45 psi)	
Rigid	11	21	31
Flexible	13		

(2) Intermediate bulk container code letter designations are as follows:

“A” means steel (all types and surface treatments).
 “B” means aluminum.
 “C” means natural wood.
 “D” means plywood.
 “F” means reconstituted wood.
 “G” means fiberboard.
 “H” means plastic.
 “L” means textile.
 “M” means paper, multiwall.

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“N” means metal (other than steel or aluminum).

(b) For composite intermediate bulk containers, two capital letters are used in sequence following the numeral indicating intermediate bulk container design type. The first letter indicates the material of the intermediate bulk container inner receptacle. The second letter indicates the material of the outer intermediate bulk container. For example, 31HA1 is a composite intermediate bulk container with a plastic inner receptacle and a steel outer packaging.

§ 178.703 Marking of intermediate bulk containers.

(a) The manufacturer shall:

(1) Mark every intermediate bulk container in a durable and clearly visible manner (applied in a single line or in multiple lines provided the correct sequence is followed) with the following information in the sequence presented:

(i) The United Nations symbol as illustrated in § 178.503(d)(1). For metal intermediate bulk containers on which the marking is stamped or embossed, the capital letters ‘UN’ may be applied instead of the symbol.

(ii) The code number designating intermediate bulk container design type according to § 178.702(a) (1) and (2).

(iii) A capital letter identifying the performance standard under which the design type has been successfully tested, as follows:

(A) X—for intermediate bulk containers meeting Packing Group I, II and III tests;

(B) Y—for intermediate bulk containers meeting Packing Group II and III tests; and

(C) Z—for intermediate bulk containers meeting only Packing Group III tests.

(iv) The month (designated numerically) and year (last two digits) of manufacture.

(v) The country authorizing the allocation of the mark. The letters ‘USA’ indicate that the intermediate bulk container is manufactured and marked in the United States in compliance with the provisions of this subchapter.

(vi) The name and address or symbol of the manufacturer or the approval agency certifying compliance with subparts N and O of this part. Symbols, if used, must be registered with the Associate Administrator for Hazardous Materials Safety.

(vii) The stacking test load in kilograms (kg). For intermediate bulk containers not designed for stacking, the figure “0” must be shown.

(viii) The maximum permissible gross mass or, for flexible intermediate bulk containers, the maximum net mass, in kg.

(2) The following are examples of symbols and required markings:

(i) For a metal intermediate bulk container containing solids discharged by gravity made from steel:



11A/Y/02 92/USA/ABC/5500/1500

(ii) For a flexible intermediate bulk container containing solids discharged by gravity and made from woven plastic with a liner: